R REF
✓ LIST 2

Copy No. 3

SECRET
US officials Only

0973
Z10925
4387/47

MAJOR FACTORS CONTROLLING THE SIZE OF THE CHINESE COMMUNIST ARMIES

DEPARTMENT OF STATE
REFERENCE DIVISION
FILE COPY
PLEASE RETURN
REF

R+A OIR Report No. 4387

June 25, 1947

DEPARTMENT OF STATE

Division of Research for Far East
OFFICE OF INTELLIGENCE RESEARCH

SECRET
US Officials Only

TABLE OF CONTENTS

		Page
Summary		iii
I.	Major Elements in the Growth of the Chinese Communist Army	1
II.	Rate of Growth from Late 1944 to Mid-1947	4
III.	Future Expansion	7
IV.	Political Implications	12

SUMMARY

Despite an apparent leveling off in the size of their armed forces since late 1946, the Chinese Communists now appear to be undertaking a general offensive in the civil war. Very rapid expansion in the past two years has apparently brought the Chinese Communist Army to a point at which it can capitalize extensively on both the tactical shortcomings and the general deterioration of Nationalist forces.

Factors controlling the expansion of Communist forces are clearly illustrated in the rebuilding of those forces after their decimation by Chiang Kai-shek's campaign in 1934. These factors are procurement of rifles, extent of disposable food surpluses, and ammunition supplies. The sixfold expansion in Communist forces between 1934 and 1944, from 80,000 to 480,000 men, apparently followed on the heels of large-scale captures of rifles early in the Japanese war. Near-doubling of the 1944 forces by mid-1946 may be attributed primarily to the acquisition of Japanese materiel, through Soviet help, in Manchuria.

It is unlikely that the Communist Army will again attain the rate of growth prevailing from VJ-day to mid-1946. Foreseeable expansion during the year July 1947-July 1948 cannot exceed and probably will not reach one-third of the present army of nearly one million men.

Red Army expansion within these limits will depend almost

entirely on the rate of defeat and deterioration of Nationalist armies. To restrict the current success of the numerically still inferior Communist forces would require a thorough reform in the whole Nationalist administration of the war. Only by reform can the Nationalists hope to stave off further absolute or relative increases in Communist forces and the accompanying possibility of defeat in the civil war.

MAJOR FACTORS CONTROLLING THE SIZE OF THE CHINESE COMMUNIST ARMIES

I. MAJOR ELEMENTS IN THE GROWTH OF THE CHINESE COMMUNIST ARMY

All existing evidence seems to support the contention of the Chinese Communists that the availability of matériel and supplies rather than the availability of manpower is the controlling factor in Communist army expansion. During the twenty-year history of their army (1927-47), the Communists have been able to recruit manpower for their regular forces as rapidly as matériel and food could be acquired. For overpopulated China, these assertions may appear to be truisms, though even with adequate supplies, military conscription in China cannot, of course, be unlimited.[1]

All current and past estimates of the human and matériel complement of the Communist armies are approximate. In order to discover the crucial elements in expansion of the Communist army, this study begins with the soundest of recent estimates, those given by the Communists

---

1. J. Lossing Buck's Land Utilization In China (Shanghai, 1937) provides the the best estimates of the extent of employment of China's peasant population, the major source of military recruits in China. The ultimate limitations upon the size of an economically unproductive army may be inferred from Buck's calculations that, despite average winter idleness of more that one month per adult, more than 98 percent of China's rural population is employed substantially full time.
   Cognizant of this fact, the Communists have attempted to put the average soldier to work during his idle periods. Their effort probably maintains existing food surpluses but does not increase them.

themselves in the third quarter of 1944.[1]

Regular troops listed in late 1944 totaled 480,000 men. The peasants' militia, which served as a training and fighting auxiliary for the regular forces, numbered 2,100,000 men. These figures focus attention on the expansion that had taken place in the Communist forces since Chiang Kai-shek's nearly successful annihilation campaigns in 1934, ten years before, and on the later expansion from 1944 to 1946. By 1944, the Communists had increased their 1934 army of 80,000 men sixfold, and from 1944 to 1946 they roughly doubled the armies of 1944. Expansion at this rate was a feat of both recruitment and re-equipment. The latter, however, seems to have been the more important accomplishment.

Effective Communist rifles in late 1944 numbered some 280,000, of which nearly all were in the hands of the regular forces. The ratio of rifles to regulars was accordingly 1.00:1.71. This general ratio is slightly higher than the ratio of 1.00:2.15 for a Class A division, whose complement is as follows:

Type	Number
Men	1,763
Rifles	817
Light machine guns	27 - 54
Heavy machine guns	6
Grenade throwers	15 - 27
Mortars or infantry cannon	4

1. Estimates prepared by Communist military leaders at Yenan for American military observers. See D-3052, Chungking, October 11, 1944, SECRET.

This disparity in ratios may be accounted for by the relatively large number of heavier weapons employed by a Class A division, which reduces the need for rifles. It is not large enough to affect significantly the validity of using rifles as the prime measure of effective Communist matériel, however.

A breakdown of rifles by source of acquisition indicates the phases of growth of the Communist armies before 1944:

Source[a]	Number
Original complement	40,000
Japanese (indirectly or directly)	90,000
Nationalist (through defeat by Japanese or by Communists)	90,000
Miscellaneous (volunteers with own rifles, etc.)	60,000

a. By Communist statement, in 1944 their arsenals were capable only of repairing weapons; any production was insignificant.

Nationalist weapons were obtained largely on the battlefields of North China during the great Nationalist defeats in the early Japanese campaigns.[1] Japanese rifles were procured in the five years 1938-43 by Communist guerrilla tactics against Japanese troops.

Recurring procurement was therefore at an average rate of only 20,000 weapons a year. Had the Communist forces been dependent on the Japanese alone for weapons, they would have expanded at a rate of no more than 40,000 men per year, and expansion on these principles would have ended for the most part in 1943, when the Japanese began to apply

1. D-3052, Chungking, October 11, 1944, SECRET.

"extermination" tactics in North China.[1]

II. RATE OF GROWTH FROM LATE 1944 TO MID-1947

The salient features of Communist military progress in the period from late 1944 to mid-1947 were the near-doubling of the Communist armies from mid-1945 to mid-1946 and the reaching of a plateau in expansion in the second half of 1946 and early 1947. Since March 1947, potentialities have existed for moving off this plateau, but at a lesser rate of growth than that obtaining during the ten months or so after VJ-day.

Communist plans in early 1945 called for an increase of 80 percent over their 1944 forces, or from nearly 500,000 men to 900,000 men. Considerable evidence exists that the implementation of this plan through recruitment and training was under way in mid-1945. There is reason to suspect, however, that the plan was conceived in anticipation of an early end to the Japanese war and that in early 1945 the means to complete it were still lacking. Expansion before VJ-day is therefore credited to the post-VJ-day period, when the weapons were found to convert hopes into reality.

The bulk of postwar Communist army growth has rested on the seizure in Manchuria, with Soviet approval, of large quantities of Japanese matériel. Less decisive but of continuous importance have been the progressive and recurring large-scale seizures of Nationalist weapons since

---

1. Communist military leaders admitted in 1944 that Japanese blockhouse tactics had seriously hindered procurement of weapons for more than a year.

late 1946. Both have immeasurably enhanced ultimate prospects of Communist military victory; the latter, especially, seems to have given Communist leaders visions of enormous reservoirs of matériel.

Following are estimates of accretions to the Communist rifle complement by mid-1927 through these two developments:

Source	Number[a]
August 1945 establishment	300,000
Acquired in Manchuria	250,000[b]
Seized from Nationalists	150,000[c]

a. All figures are minima.

b. Estimated from data on the Japanese surrender in Manchuria, including the known complement of the Kwantung Army, the number of troops surrendering to the Russians, the nature and timing of the Communist entry into Manchuria, and the size of original hold-out armies. See DRF Information Note No. 52, February 15, 1947, SECRET.

c. Estimated as of June 1947.

In the gains in Manchuria alone, the Communists obtained almost as many rifles as they possessed at the end of the war. Estimated seizures from the Nationalists in the nearly two years since surrender amount to 1.5 times the total taken from the Japanese during more than five years of the Japanese war.

Were all rifles in the VJ-day complement still operable, the Communists would today possess 700,000 effective rifles. Obsolescence may reduce this figure by as much as 100,000 weapons, leaving approximately 600,000 effective rifles.

This number of rifles is considered sufficient to arm some 1.0 to 1.2 million troops. Owing to deficiencies in other weapons of fire,

notably machine guns, the Communists established a higher ratio of rifles to men during the Japanese war than that prevailing in either the Nationalist or Japanese armies. It must be supposed that adjustments in the postwar table of establishment following acquisition of machine guns and mortars may have lowered the ratio from 100:170 to 100:200. In the range of manpower cited above, this eventuality is taken into account.[1]

Communist regular forces do not appear to number over one million men[2] as yet. Although not quite up to the human strength permitted by the table of establishment, this force seems to have incorporated most of the gains of matériel from Japanese sources. From mid-1945 to mid-1946 the Communists added 400,000 to 500,000 regulars to their army, nearly doubling its size. From late 1946 to March 1947 emphasis seems to have been on the consolidation of forces, with little expansion taking place. Developments since March 1947 are a matter of speculation, since it is known that the Communists at that time came into possession of large new stocks of weapons in Shantung Province, but no new large-scale expansion has been confirmed. Such expansion would presumably occur after a time lag of three to six months.

---

1. For further evidence on this subject, see accounts of Communist table of establishment in Manchuria in OF-3684, March 19, 1947, SECRET, or REF-355.9518/N3424, November 26, 1946, CONFIDENTIAL.
2. G-2 of the Chinese Nationalist Army has consistently numbered the Communist forces at well below one million. A November 16, 1946 estimate placed their strength at 790,000 active troops. On March 15, 1947, G-2's estimate stood at 819,000 "active troops." For this study an approximate mid-point between these Chinese G-2 figures and highest US estimates, which stand at 1.11 million troops, has been taken. See REF-355.951/R3660, December 9, 1946, CONFIDENTIAL, and REF-355.951/R3661, April 18, 1947, SECRET.

III. FUTURE EXPANSION

Communist forces will not expand in the immediate future at a rate approaching that following VJ-day. To double an army of one million men within a year would require the capture of 40,000 rifles per month, or more than the output of all of China's arsenals. Even if it were possible, there would be no military necessity for expansion at this rate, since it presupposes such depletion of Nationalist strength that Nationalist armies would no longer be effective fighting forces. Projection of expansion must therefore balance military necessity against military probabilities.

Anticipating the most probable eventuality -- a continuing trend of Communist military victories, the velocity of which is diminished somewhat by Nationalist retrenchment -- the rate of Communist expansion in 1947-48 may be placed in the range of from 200,000 to 350,000 men. This assumes the capture of a maximum of 200,000 rifles in that period and the partial replacement of the antiquated complement of the Communist armies.[1] In the course of this expansion the Communists could conceivably realize an army larger in size than the remaining regular armies of Chiang Kai-shek. Increments above this level probably will be precluded by shortages of both ammunition and food.

---

1. The Communists may conceivably acquire productive capacity during this period. Since even the Mukden arsenal can produce no more than 10,000-15,000 rifles per year, however, potential capacity is not regarded as significantly affecting the expansion of Communist armies. Only in supplying t eir ammunition requirements might it affect expansion.

Ammunition stringencies for such large forces may well constitute some barrier to military growth.[1] It seems likely that in mid-1948 over 40 percent of the Communist rifles will still be of Japanese manufacture, as indicated in the following estimate of the Communist weapons complement:

Type	Number
Japanese	300,000
Miscellaneous (mostly 7.92 mm.)	300,000
American	100,000

Most of the stocks of Japanese ammunition captured in Manchuria will presumably have been exhausted, however.[2] Captures from Nationalist soldiers afford little opportunity for replenishment of Japanese stocks, since few Nationalist troops now use Japanese rifles with the original bore. Supplies of necessary Japanese ammunition may therefore be expected to run short.

A further obstacle to rapid and unlimited expansion may be the inadequacy of food supplies in Communist areas, especially in North China. Since the early 1940's the Communists have recognized the dangers of

---

1. In late 1944 Communist military leaders emphasized their ammunition difficulties, pointing out that the average supply per rifle was only 30 rounds. In 1946 the average supply per rifle was estimated at 140 rounds, or more than four times the supply in 1944. Despite the inability of their arsenals to furnish limited needs in 1944 and despite the shortage of ammunition when spread over all their weapons, the Communists do not allow ammunition to stand in the way of expansion of their forces. The possibility that the USSR is now supplying the Chinese Communists with rifle ammunition for Japanese weapons should not be overlooked. Owing to the utter lack of information, however, this possibility can only be stated, not evaluated.
2. Estimated at no more than 250 million rounds.

unrestricted army growth without regard for the food supplies of the areas in which these troops are stationed.[1] By the Communists' own criteria it is estimated that regions of North China now held would not support more than one million troops, an increase of 300,000 in the present force there. Communist Manchuria, a food surplus area, can supply at the very least 625,000 troops,[2] and possibly many more; this represents, at a minimum, 300,000 more troops than are currently posted there. The limitations described here may therefore apply more directly to the employment of the Communist forces in certain areas than to their foreseeable growth.

The food surplus of the various regions of North China may be expressed better as a ratio of the population than as an absolute figure. The form of Communist 1944-45 army and militia estimates constitutes acknowledgment of this fact. The Communists calculated, for example, that the People's Militia, a fixed peasant auxiliary, should equal 5 percent of the populace.[3] The regulars in turn should comprise a ratio of one to four or five of the Militia. In the present Communist areas of roughly 100 million people, Communist regulars should presumably not exceed 1 to 1.25 million troops. Available food supplies would still

---

1. The Shen-Kan-Ning border area never supported more than 50,000 active regulars.
2. The size of the Kwantung Army. See following page for estimate of food surplus.
3. See Mao Tse-tung's speech, December 16, 1944, Task for 1945.

afford this body of troops some mobility, although in general the density of troops should be proportionate to the density of the population.[1] The greatest fighting strength of the Communists should therefore lie in Hopeh, Shantung, northern Honan and Kiangsu Provinces, and should decrease to the west.

Optimum Japanese food collections in the agricultural areas of North China now controlled by the Communists afford a rough confirmation of this conclusion. Collections in North China[2] during the favorable years of the early 1940's never greatly exceeded 400,000 tons of all types of foodstuffs per year, although forced requisitioning was employed.

To make up North China's deficits entailed importation of from 0.5 million to more than 1 million tons of foodstuffs annually. Japanese armies were therefore in direct competition with Chinese cities for available surpluses.

---

1. Communist order-of-battle figures show how responsive the Communists are to this economic dictum, which is a prime consideration in Nationalist military strategy as well. See REF-355.951/R3661, April 18, 1947, SECRET.
2. Including Hopeh, Shantung, Shansi, and northern Honan, but not northern Kiangsu (Huai-hai). See ORI-3693, Japanese Materials on Wartime Agriculture in North China, June 1, 1946, CONFIDENTIAL.

Assuming that Communist armies have no great concern for the welfare of urban dwellers, they might achieve a disposable surplus of the same magnitude as the Japanese, that is, 400,000 tons. At the Communist grain ration of 720 pounds per man per year, they might conceivably support in North China, north of the Lung-hai Railroad,[1] an army of 1.2 million men. This presupposes no competitive requisitioning in the same areas by the Nationalists and no rail shipments from Manchuria.

Shantung Province affords a regional example of this argument. With a population of 38 million and an optimum surplus of 75,000 to 100,000 tons of foodstuffs yearly, Shantung can provide livelihood and mobility to no more than 300,000 regular troops. The current Communist complement of 200,000 to 300,000 troops there is accordingly not far from the saturation point.

A glance at Manchurian food surpluses demonstrates, however, that the obstacle posited here stand more in the way of employment of Communist forces than of the expansion of these forces. Communist Manchuria has an exportable food surplus that is estimated today at upward of 2 million tons per year.[2] Were the population of Communist Manchuria[3]

---

1. Reports from northern Honan Province indicate extensive food requisitioning by both armies. See A-3117, Hankow, March 3, 1947, CONFIDENTIAL. Nationalist troops in Shantung, however, seem to depend on imported food supplies. See REF-355.951/P3096, March 4, 1947, CONFIDENTIAL.
2. See OIR-4348, Sino-Soviet Trade in 1946, April 11, 1947, CONFIDENTIAL.
3. Estimated in October 1946 at 26 million, or two-thirds the population of Shantung Province. See Anna Louise Strong, "Communist Regime in Manchuria," Amerasia, May 1947.
   The present Communist army in Manchuria (300,000 men) is believed to contain no more than 90,000 newly drafted Manchurians.

capable of supporting extensive conscription, the Communists might find means to feed an army of 5 million men. The major problem in the expansion of their armies is, therefore, to move the human surpluses of China proper to the agricultural surpluses of Manchuria; or in the employment of their armies to move the agricultural surpluses of Manchuria to the human surpluses of China proper. Whether they can accomplish either task will depend largely on their ability to acquire operating control of the north-south trunk lines in Manchuria and North China or to increase facilities for the transport of men and goods by sea.

Under predictable circumstances, it seems very unlikely that the Communist armies will expand to more than 1.5 million men by mid-1948. The equilibrium that this assumes among all factors controlling army expansion may easily be disturbed either by extensive defeats for Nationalist forces in Manchuria and in the northern part of North China or by active Soviet participation in the Chinese civil war.

IV. POLITICAL IMPLICATIONS

This slower rate of Communist army expansion should have no material effect on the course of China's civil war. The present Communist military offensive dates only from early this year and has occurred during a period of leveling off and consolidation of Communist forces. Reasons for the Communists' current successes must be sought in the other two important factors in the military situation: the qualitative and quantitative decline in the Nationalist forces, and Communist superiority in

the employment of their forces.

Any significant increases in Communist forces during the coming year will depend on the rate at which the Communists acquire rifles. The only potential sources that offer any promise of providing sufficient weapons to augment the present Communist complement effectively are the Nationalist armies and the Soviet Union.

Prospects that the USSR will make available the requisite numbers of rifles are very slight. Such aid, calling heavily on Soviet military supplies, would seem to have little present justification, since the Chinese Communists have apparently been successful to date without Soviet assistance. It is conceivable, but not likely, that the USSR may attempt to offset American assistance to the Nationalists by helping the Communists to expand their forces. This eventuality rests on two undemonstrable propositions; first, that the US will provide sufficient weapons to turn the civil war in favor of the Nationalists; second, that the USSR will risk war to maintain the present Communist advantage in China.

Communist military expansion appears, by elimination, to have a direct correlation with Nationalist military deterioration; that is, Communist forces can grow only as fast as weapons are seized from the Nationalists. Indeed, maintenance of the Communist Army at its current strength is dependent in large measure upon the replacement of lost, obsolescent, or damaged weapons by captured Nationalist arms.

Thus, the chief requisite to stemming the expansion of Communist military power is improved performance on the part of the Nationalist military forces. In turn, an improvement in the field can follow only upon an improved governmental performance in Nanking. The grand strategy of the Nationalist armies (a strategy that has committed first-class troops to sterile garrison duty in essentially unproductive and semi-isolated outpost cities), the selection of field commanders (some of whom have demonstrated an extreme incapacity for military leadership), and the procurement of men and supplies (now accompanied by corruption on a vast scale) represent decisions and actions for which the government at Nanking is finally responsible. Until these basic weaknesses are overcome, there can be no reason to expect a significant change in the pattern of Communist military success.